

Appl. No. 10/639,461
Amendment dated: April 14, 2005
Reply to OA of: January 14, 2005

REMARKS

Applicants submit herewith a Request for Continued Examination (RCE) along with this amendment as the required submission in response to the outstanding Final Rejection. Please enter the amendment which it is believed clearly overcomes the outstanding rejection.

Applicants have amended the claims to more particularly define the invention taking into consideration the outstanding Official Action and as fully supported by the specification as originally filed, including the drawings. Applicants most respectfully submit that all the claims now present in the application are in full compliance with 35 U.S.C. §112 and are clearly patentable over the references of record.

Claim 1 has been amended to specify additional electronic components mounted in an opposite place than the connecting head and on the other surface of the circuit board part in the substrate using a Chip On Board (COB) or Surface Mount Technology (SMT); and a metal case housing the substrate and the electronic components as fully supported by the application as originally filed as would be interpreted by one of ordinary skill in the art to which the invention pertains. Claim 8 has been canceled without prejudice or disclaimer.

The claim amendments also improve the clarity of the claimed subject matter and to bring the claims into conformity with U.S. practice and format, and to place the application fully in condition for allowance. Claims 1-5 and 7 remain pending upon entry of the amendments to the claims above, and reconsideration of this application is respectfully requested in view of the amendments to the claims and following remarks.

Appl. No. 10/639,461
Amendment dated: April 14, 2005
Reply to OA of: January 14, 2005

Response to Rejections Under 35 U.S.C. § 103

The rejection of claims 1-3, 5 and 8 under 35 U.S.C. § 103(a) as being unpatentable over Long et al. (2003/0028797) in view of Tirosh (6618243) and further in view of Sobhani (5213511) has been carefully considered but is most respectfully traversed in view of the amendments to the claims.

Similarly, the rejection of claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Long as modified by Tirosh and Sobhani and further in view of Dierking (5775485) has been carefully considered but is most respectfully traversed in view of the amendments to the claims.

Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Long as modified by Tirosh and Sobhani and further in view of Anderson (5973734). Again, it is submitted that the combination of references does not render the claimed invention prima facie obvious.

Applicants wish to direct the Examiner's attention to the basic requirements of a prima facie case of obviousness as set forth in the MPEP § 2143. This section states that to establish a prima facie case of obviousness, three basic criteria first must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Appl. No. 10/639,461
Amendment dated: April 14, 2005
Reply to OA of: January 14, 2005

Section 2143.03 states that all claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Applicants also most respectfully direct the Examiner's attention to MPEP § 2144.08 (page 2100-114) wherein it is stated that Office personnel should consider all rebuttal argument and evidence present by applicant and the citation of In re Soni for error in not considering evidence presented in the specification.

Regarding claim 1, as a comparison of the structure, Applicants wish to respectfully point out that the inventive metal case (3) houses the entire substrate including the circuit part and the connecting head, but Long's circuit board are housed by three separate parts including a shell, a first housing and an exterior housing (Fig. 2 and associated description) even if their plastic materials are changed into a metal as taught by Tirosh. The combination of references does not provide the necessary motivation to combine the references and arrive at the presently claimed invention absent Applicants' teaching which may not be used as the teaching to modify the references and arrive at the claimed invention. In re Fritch, 23 USPQ 1780, 1784 (Fed Cir. 1992) ("It is impermissible to engage in hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps.).

In addition, the inventive substrate of the present invention mounts electronic components on both sides, which is not disclosed in any of the cited references. This is a further claim limitation which cannot be ignored. Accordingly, it is most respectfully requested that the rejections be withdrawn.


Appl. No. 10/639,461
Amendment dated: April 14, 2005
Reply to OA of: January 14, 2005

Moreover, claims 2-5 and 7 are patentable based on the amended claim 1 as well as their own merits. Accordingly, it is most respectfully requested that these rejections be withdrawn.

In view of the foregoing remarks, reconsideration and allowance of the application are now believed to be in order, and such action is hereby solicited. If any points remain in issue that the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,

BACON & THOMAS, PLLC

By: 
Richard E. Fichter
Registration No. 26,382

625 Slaters Lane, 4th Fl.
Alexandria, Virginia 22314
Phone: (703) 683-0500
Facsimile: (703) 683-1080

REF:kdd
A01.wpd

April 14, 2005